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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,368	01/30/2004	Roger F. Buelow II	2497	6538
7617	7590	06/08/2006	EXAMINER	
BRUZGA & ASSOCIATES 11 BROADWAY, SUITE 715 NEW YORK, NY 10004				CHOI, JACOB Y
		ART UNIT		PAPER NUMBER
		2875		

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/768,368	BUELOW ET AL.	
	Examiner	Art Unit	
	Jacob Y. Choi	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 May 2006.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-34 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

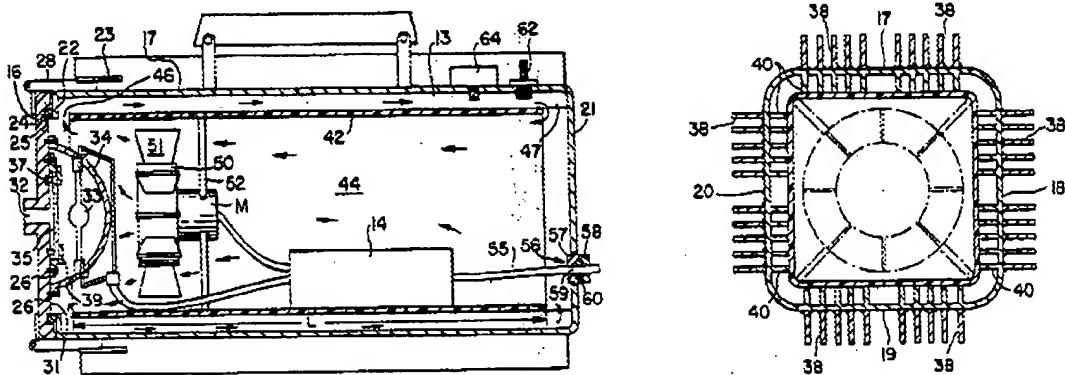
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (USPN 4,419,716) in view of Tobias et al. (USPN 5,432,688).

Regarding claims 1, 21, & 27, Koo discloses a light appliance (e.g., 33, 34), a sealed vapor proof enclosure (e.g., column 1, lines 42-54; "... *The housing assembly of the present invention comprises a sealed enclosure for isolating an electrical device within a protective atmosphere and a cooling system ... in order to maintain the temperature of the sealed housing within safe limits ... The latter feature provides assurance that the housing assembly is truly sealed and leak free ... etc.*" for the light appliance (e.g., 33, 34) that gives off unwanted heat into surrounding air within the enclosure (e.g., 12) during operation, the enclosure (e.g., 12) having an external wall (e.g., 17-20) at least part of which is thermally conductive (e.g., 38), a medium (e.g., Abstract; "... *ambient atmosphere ... etc.*" that is in contact with the external wall of the enclosure, the medium having adequate thermal conductivity, and being sufficiently cooler than the external wall of the enclosure that cooler than the external wall (e.g., 17-

Art Unit: 2875

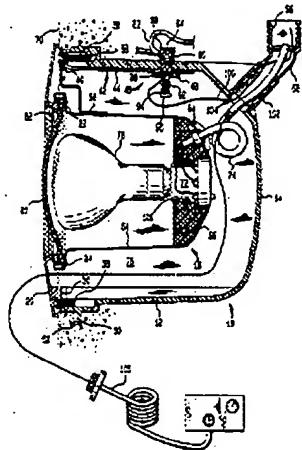
20; columns 2-3, lines 65-25) of the enclosure (e.g., 12), an electrical driver (e.g., Figure 4, 3) comprising an electrical or electromagnetic device (e.g., column 4, lines 30-55) for converting voltage and limiting current to the light appliance, and an air circulating device (e.g., 50) for circulating air, heated by the light appliance (e.g., 12) or by the air circulating device (e.g., 50), to the thermally conductive portion of the external wall (e.g., 16-20) for removing sufficient heat from the air by thermally dissipating the heat into the cooler medium through the thermally conductive portion of the external wall (e.g., columns 2-3, lines 65-25) so as to substantially increase lifetime of the light appliance.



Koo failed to specifically mention that the enclosure being liquid-tight. However, Koo expressly suggest that the housing is vapor proof (e.g., column 2, lines 15-65; "... *the vapor proof housing 10 of the present invention. The vapor proof housing assembly 10 comprises a hollow casing 12 forming a sealed enclosure 13 for isolating an electrical device 14 from the ambient atmosphere surrounding the housing 10 ... an elastomeric gasket an air tight glass window 35 ... "O" ring 37 is mounted between the filter 35 and the front door panel 16 ... etc.*").

Tobias et al. teaches the light fixture assembly having the liquid-tight enclosure (e.g., column 3, lines 40-55; "... *the shell 54 of the light fixture 18 is sealed by virtue of a*

*lens plate 80 and a gasket 82, which cooperate to prevent water from entering the shell 54. In addition, a cable seal 84 is provided to prevent water from entering the shell 54 at the point of entry of the power cable 74 ... " & " ... a space 76 between the interior surface of the housing 12 and the shell 54 of the lighting fixture 18 accommodates water which serves to cool the lighting fixture 18 when it is heated by an incandescent bulb 78 ...").*



It would have been obvious to one of ordinary skill in the art at the time of the invention to modify a sealed vapor proof enclosure of Koo with the liquid-tight enclosure of Tobias et al. to utilize the apparatus in more versatile environment to prevent any damages to the electrical components inside the enclosure. The following modification would achieve the enclosure to be further protected against any water damage.

Note: Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

In order to be given patentable weight, a functional recitation must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

Regarding claims 2-7, 9, & 22, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the claimed invention except for specific other well known light sources.

Koo teaches that the lamp may represent any conventional source of light source as an ultraviolet mercury lamp (e.g., column 2, lines 55-55).

Koo does not specifically mention any other well known light sources.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional source of its kind, as taught by Koo in order to benefit from wide range of lighting characteristics.

Regarding claim 8, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the light appliance further comprises a heat sink (e.g., 38) for removing heat from the light appliance.

Regarding claim 10, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the light appliance further comprises a heat sink for removing heat from the source.

Regarding claim claims 11-15, 33 & 34, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the claimed invention except does not specifically mention what the medium may be.

Koo discloses the "vapor proof housing assembly" to be used in an airplane hanger or mine filed for a typical example in which the ambient atmosphere may be (e.g., column 1, lines 5-20).

In addition, Tobias et al. teaches the medium may be ground (e.g., 70) and water (e.g., column 3, lines 45-55; "... a space 76 between the interior surface of the housing 12 and the shell 54 of the lighting fixture 18 accommodates water which serves to cool the lighting fixture 18 when it is heated by an incandescent bulb 78 ...").

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the device of Koo any useful environment and the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The prior art structure is capable of performing the use in some useful environment such as ground, air, & water (especially with provided obvious reasons above with reference Tobias et al.).

Regarding claim 16, Koo in view of Tobias et al. discloses the claimed invention, explained above. In addition, Koo discloses the air-circulating device comprises an electrical fan.

Regarding claim 17, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the air-circulating device comprises a heat pump or an air pump.

Regarding claims 18-20, 24-26, & 30-32, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the claimed invention except for the specific material for the thermally conductive wall.

Koo teaches the fins are preferably arranged in a complimentary fashion in the exterior and preferably aluminum welded to the side walls (e.g., column 3, lines 5-25).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize well known material such as stainless steel or glass for the light extracting side walls, since it has been held to be within the general skill of a worker in the art to select a known material on the basis its suitability for the intended use as a matter of obvious design variation. *In re Leshin*, 125 USPQ 416.

Regarding claim 23, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the claimed invention, explained above. In addition, Koo discloses the light appliance further comprises a heat sink for removing heat from the lamp.

Regarding claim 28, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the light appliance comprises a filament-ed lamp or a high intensity gas discharge lamp.

Regarding claim 29, Koo in view of Tobias et al. disclose the claimed invention, explained above. In addition, Koo discloses the light appliance further comprises a heat sink for removing heat fro the lamp.

***Response to Arguments***

3. Applicant's arguments filed 5/12/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "... any pressure outside the assembly from being underwater ... would exceeds the assembly's interior pressure would open the one-way valve and allow water to enter ... etc.") are not recited in the rejected claim(s). For example, claim 1 recites "*the medium having adequate thermal conductivity ... etc.*", claims 21 & 27 recite "*a medium comprising\* water ... etc.*". Applicant's is reminded claims do not further recite the medium is only limited to underwater with specific amount of pressure is provided to the device, where that specific amount of underwater pressure would cause failure to the device of Koo (716') and/or reconstruction of Koo (716') in view of Tobias et al. (688'). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, claim rejection(s) under 35 USC § 103, Koo (716') in view of Tobias et al. (688'), is proper because it takes account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that substantial reconstruction and redesign of such assembly and would change basic principles of operation of the assembly relating to leak detection, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Note: \* the term "comprising" is an open-end term

Koo teaches that "... a conventional switch or switching circuit 72 which may be either manual or electronic for switching from either the battery 68 or the AC source of line potential ... etc." and where the air valve is utilized to further increase the efficiency of the heat transfer between the enclosure and the ambient atmosphere (e.g., column 4, lines 15-30) not purposely for initiating the pressure actuated switch. Both pressure actuated switch and temperature actuated switch are to be responsive to increase the safety of the device at predetermined set pressure and temperature.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



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